Attorney's Docket No.: 14219-121US1 Applicant: Wolfgang Paul Client Ref. No.: P2004, 0184 US N

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AMENDMENTS TO THE SPECIFICATION:

Please delete the word "Description" at page 1, line 1.

Please add the following centered heading on page 1, line 5:

BACKGROUND

Please amend the paragraph on page 2, lines 26-28, as follows:

The patent application describes objective of the present invention, therefore, is to specify a new structure of the encapsulated components, which can be produced in a simple wafer-level package (WLP) process.

Please add the following centered heading on page 3, line 1:

SUMMARY

Please delete the paragraph on page 3, lines 1-3 which begins with "In accordance with the invention, the foregoing objective..." in its entirety.

Please amend the paragraph on page 3, lines 5-15, as follows:

The patent application describes invention specifies an electronic component, which is provided in or on a substrate. On the main surface of the substrate, terminal contacts of the

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electric component structures are provided. The encapsulation encompasses a cover with terminal pads and through platings via which the terminal contacts through the cover are connected with the external contacts of the overall component. The cover is located on the so-called "main surface," so that the terminal pads on the "undersurface" of the cover are located at a distance opposite the terminal pads on the surface of the substrate. A cavity is provided between the contacts, which is completely filled with conductive adhesive, which makes the electrical connection between the substrate and cover and/or between the terminal pads and the terminal contacts. The conductive adhesive provided in the cavities is able to ensure, or at least contribute to, the mechanical connection between substrate and cover.

Please amend the paragraph on page 4, lines 5-10, as follows:

In an improved embodiment of the invention some embodiments, an intermediate layer is configured between the substrate and the cover, in which the cavities are configured. The intermediate layer can be structured and solely serves to form the cavities in said layer.

Preferably it consists of a material which can easily be shaped, especially a synthetic material.

Said material may cover the entire main surface, except the cavities. The intermediate layer may also comprise several cavities in which the component structures can be arranged.

Please amend the paragraph on page 5, lines 4-16, as follows:

Within the meaning of the invention In general, a conductive adhesive is understood to be a material, which can be processed in a liquid condition or with adequately low viscosity, but is

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conductive at the component's operating temperature, especially a conductive synthetic material, which hardens and simply solidifies. Preferably, the conductive adhesive is a reaction resin, which hardens at low temperatures and is filled with electrically conductive particles. Low hardening temperatures, for example below 100° C, can be achieved with two-component reaction resins, in which their resin and hardening components are mixed shortly prior to application. Another option is to use light hardening or UV hardening resins. This option exists especially when the substrate or cover in the required spectral range is sufficiently permeable and the adhesive, therefore, can be exposed from the outside or be irradiated. Overall, a low temperature hardening conductive adhesive is able to perform the adhesion in such a way that no thermal tensions will occur after the adhesive has hardened. This, for example, can also be achieved by means of microwave irradiation.

Please amend the paragraph on page 5, lines 18-30, as follows:

A preferred application of an inventive component In some embodiments, the components include are components operating with acoustic waves, especially SAW filters and FBAR components. The inventive encapsulation configuration also is an advantage to MEMS components, especially in connection with a frame structure, which provides a cavity for the component structures. Particularly advantageous is the invention for realizing SAW and FBAR components, if said components operate at low frequencies (e.g., below 100 MHz), and therefore require particularly large substrates. Because of the porosity of the known, crystalline, piezoelectric materials, substrates made of these materials are particularly break-sensitive, and

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previously were used exclusively in an encapsulated and protected form in housings and for

contacting by means of wire-bonding techniques. Compared with a component installed in a

housing, a component an inventive component has the advantage of considerably lower height,

which makes the components accessible to new applications, especially mobile components used

in information and communications technology, e.g., cell phones and PDAs.

Please amend the paragraph on page 6, lines 1-5, as follows:

The inventive components can be produced quite simply and elegantly by a new process.

The principle according to the invention is to fit the substrate with the component structures on

top of each another, so that the terminal pads and the terminal contacts are located opposite each

other, are separated from one another by the height of the frame structure or the intermediate

layer described in the above.

Please add the following centered heading on page 8, line 25:

DESCRIPTION OF THE DRAWINGS

Please amend the paragraph on page 8, line 26, as follows:

Figure 1 shows a perspective view of an inventive a component.

Please add the following centered heading on page 9, line 10:

DETAILED DESCRIPTION

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Please amend the paragraph on page 9, lines 14-23, as follows:

Figure 1 shows a perspective view of a simple embodiment of an inventive a component. The component BE comprises a substrate SU on or in which electrical component structures (not shown) are realized. On the top of the substrate SU, a frame structure RS is configured, which serves as a spacer for the cover AD, which rests on the frame structure RS. The cover AD comprises terminal pads AF, which in the component BE are provided directly opposite the terminal contacts ANK. The electrical connection between the terminal pads and the terminal contacts is realized by means of a conductive adhesive LK, which fills a cavity within the component. It is an improvement to realize the cavity within the frame structure RS. On the outside AS of the cover, outside contacts AUK are configured, which are connected with the terminal pads on the undersurface of the cover AD via throughplatings (not shown).

Please amend the paragraph on page 11, lines 4-5, as follows:

The production of an inventive a component is explained in the following by means of Figures 6 to 8, which show various processing phases in a schematic diagram.

Please amend the paragraph on page 11, lines 7-15, as follows:

An inventive A component can be produced completely at wafer level in a WLP (wafer level packaging) process. The component structures for a plurality of components is produced in or on the substrate SU – in this case a wafer. Each component region, in which all component

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structures of a component are configured, now is provided with a frame structure RS, which encloses the component region. For this purpose, it is an improvement, if a material suitable for photostructuring is applied to the wafer surface and structure photolithographically. Preferably a film suitable for photostructuring is laminated and, if necessary, planarized subsequently, for example, by means of a roller at an elevated temperature and under a suitable roller pressure.

The application of a corresponding photoresist is suitable for this purpose.

Please amend the paragraph on page 15, lines 10-20, as follows:

The inventive process offers an improved application for producing large area components and especially for producing SAW components or FBAR components, which operate with acoustic waves. The structure of said components, which is sensitive against mechanical influence, can be used advantageously in the cavity formed by the frame structure, and thus can be mechanically protected. Further, during the production process an excessive load on the substrate wafer, as it might occur with the known flip chip configuration, is avoided as well. Therefore, the inventive process also is suitable for producing large area components with brittle or break-sensitive substrates. The components, which operate with acoustic waves, especially have large dimensions and previously could only be packaged and protected in housings through individual processing. The SAW filters produced according to the invention therefore offer a preferred application for TV, radio, and video, as well as multimedia.

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Please delete the phrase "Component with WLP-capable encapsulation and production process" on page 21, line 3.

Please delete the phrase "Significant Figure: Figure 1" on page 21, line 11.